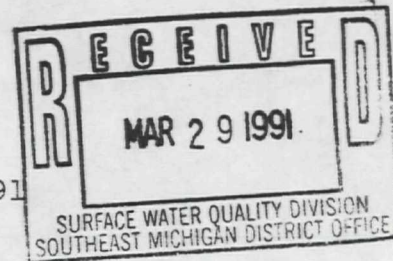




ATO CHEM NORTH AMERICA, INC.
17168 West Jefferson Avenue
Riverview, Michigan 48192-4270

Tel: (313) 285-9200



March 27, 1991

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Hae Jin Yoon
Surface Water Quality Division
Department of Natural Resources
38980 Seven Mile Road
Livonia, Michigan 48152



Reference: NPDES Permit No. MI 0002381

Dear Hae-Jin:

The following is an update of corrective actions related to incidents reported to the Surface Water Quality Division during the period of January, 1990 through February, 1991. This information is being submitted per our conversation on March 21, 1991.

Please note that a formal inter-department investigation is conducted for any spill or NPDES incident at the Atochem facility. The following summary addresses corrective actions discussed in the agency reports as well as the inter-department investigations.

1. April 22, 1990: Phenol

Most likely cause was a discharge of contaminated rainwater accumulated in a storage tank containment area.

CORRECTIVE ACTIONS: See NPDES incident on 12/23/90.

2. July 4, 1990: Visible Oil

Cause was a leaking reboiler discharging diethylhexylamine. CORRECTIVE ACTIONS: The reboiler was shut down and repaired immediately after the incident occurred. Additional absorbent booms were added to the ponds to eliminate oil discharges. These booms will be changed and installed more effectively based on the audit on March 21, 1991. A written memo was transmitted to off-shift supervision emphasizing the importance of arranging to have the ponds cleaned on off-shifts if there is a possibility that oil will enter the Outfall.

3. July 24, 1990: Spill

Cause was the draining of a pump containing sec. butylamine onto the ground and into the non-contact sewer.

CORRECTIVE ACTIONS: Hoses were purchased to drain pumps located outside the building into the building floor sump where the material can be recovered. Instructions were written and operators were trained on the proper procedure for draining outside pumps. The non-contact sewer manholes were diked to prevent ground spills from draining to the non-contact sewer system. All corrective actions are completed.

4. July 25, 1990: Spill

Cause was the draining of the building floor sump to the sewer without checking pH first.

CORRECTIVE ACTIONS: The pH meter in the sump was not working properly and was repaired. Instructions were written and operators were trained not to drain the floor sump to the sewer until the pH is in an acceptable range. A coincident plant shutdown created a low level in the pH neutralization tank which affected neutralization efficiency. Our Engineering Department is currently designing an automatic level control for the pH neutralization tank.

5. August 4, 1990: pH

Liquid amines discharged from the scrubber stack and entered the non-contact sewer due to inexperience of operator on duty.

CORRECTIVE ACTIONS: Written procedures were revised and additional training was given on the proper operation of the distillation column involved. Additional operating assistance will be provided for inexperienced operators during start-ups at the discretion of process supervision. The non-contact sewer manholes were diked to prevent ground spills from draining to the non-contact sewer system. All corrective actions are completed.

6. AUGUST 5, 1990: Spill

Caused by a leaking relief valve on a column reboiler. As a result, liquid amines discharged from the scrubber stack and entered the non-contact sewer.

CORRECTIVE ACTIONS: The inexperience of the operator on duty contributed to the extent of the spill. Corrective actions are identical to the NPDES incident on 8/4/90 because the incidents are related. All corrective actions are completed.

7. August 17, 1990: pH

Caused by the failure of a hydrochloric acid cooler.

CORRECTIVE ACTIONS: The cooler was shut down and repaired immediately after the incident occurred. A tempered water system was installed to melt out a buildup of phenolic crystals in the glass cooler as an alternative to steam which causes thermal shock. Procedures have been changed and the operators have been trained to perform more acid cooling in a jacketed receiver to minimize the use of the glass cooler. Engineering has designed a pH indicator for the sewer which collects the glass cooler water to give an early warning of cooler leakage. The Maintenance Department is in the process of installing the system.

8. November 14, 1990: Spill

Caused by the overflow of an Ethylene Oxide receiver.

CORRECTIVE ACTIONS: Discipline was given to the operator involved who was attempting simultaneous transfers. The high level alarm was repaired. The high level alarm for the receiver was added to the Preventative Maintenance Inspection checklist for the department. All corrective actions are completed.

9. December 3, 1990: pH

Caused by the failure of caustic addition in the Outfall pH Control System during a period of low pH in the sewer.

CORRECTIVE ACTIONS: The operation of the caustic control valve was checked and determined to be in proper operating condition. Pressure gauges were installed on the caustic and acid supply lines. Operators responsible for the system were trained to check these gauges regularly to help anticipate the loss of acid or caustic supply to the control valves. All corrective actions are completed.

10. December 23, 1990: Phenol

Analytical problems was the initial suspected cause. Further investigation indicated that a discharge of rainwater accumulated in a storage tank containment area contributed to the incident.

CORRECTIVE ACTIONS: A new contract lab is performing phenol analysis for the Outfall with satisfactory results. A new written procedure was completed and operators have been trained on the correct way to check rainwater in secondary containment areas before pump-out. New checklists have been added in the Production Department to monitor the siphons used to pump out storage tank containment areas. Copies are sent to the Environmental Department. A log sheet has been started in the lab to track the analytical work done on the rainwater in storage tank containment areas prior to pump-out. Maintenance Engineering is attempting to find an effective locking shut-off valve for the pump-out siphons for storage tank containment areas. The lab will be in charge of giving out a key to unlock the pump-out siphons after the analytical work is completed.

11. January 24, 1991: BOD

Caused by a leaking reboiler which contaminated the condensate discharge to the sewer.

CORRECTIVE ACTIONS: All operators were retrained on the proper corrective action when there is an abnormal indication on the condensate pH meter. The initial report indicated that the TOC detector in the sewer was not operating. Further investigation indicated that it was operating. Maintenance Engineering is in the process of modifying the condensate trapping system on all Process 21 reboilers to extend reboiler life which will reduce leaks to the condensate system.

12. February 1, 1991: pH

Caused by the overflow of MSA from a process storage tank vent line.

Ms. Hae Jin Yoon
March 27, 1991
Page 5

12. February 1, 1991: pH (Continued)

CORRECTIVE ACTIONS: The vent line was rerouted to a secondary containment area. The high level tank alarm was recalibrated and retested. The Preventative Maintenance Calibration sheets have been revised to reflect the proper setting. A continuous level recorder will be purchased and installed on the tank.

Very truly yours,

ATOCHEM NORTH AMERICA

A handwritten signature in cursive script, reading "Lawrence Bickham", written over a horizontal line.

Lawrence Bickham, Supervisor
Environmental Affairs

LB:1mm